GENERATE

Law and Judicial Review

e-ISSN: 3108-9534

Vol 02 (1) 2026 p. 1-10

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Received: 27 February 2026;
Accepted: 16 March 2026;
Published: 25 March 2026.

Conflict of interest statement:
Author(s) reported no conflict of interest

DOI: http://doi.org/10.70764/gdpu-ljr.2026.2(1)-1

INTERPLAY OF GM CROPS AND CONSUMERS RIGHTS: REVIEWING HANDLING AND LABELLING MECHANISM UNDER THE EXISTING BIOSAFETY FRAMEWORK OF INDIA

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ABSTRACT

Objective: The present study becomes the voice for consumer rights that needs attention and protection in the context of genetically modified crops (GM crops) in India. In doing so, the study considers consumers as the representative of public interest and a primary stakeholder of such crops. While consumers are made subjects of handling and production consequences of consumable GM crops, labelling of such transgenic products promotes consumers to exercise their 'right to choose' and make informed decisions in regards to it. The interplay of the three terms, namely, harm, difference and choice, witnesses a recurring appearance in the present literature. While 'harm' refers to the concerns that walk with GM crops, 'difference' visualizes the required distinction between GM and non-GM crops and lastly, 'choice' reflects consumers' ability to make rational decisions with respect to GM crops. The present research questions whether the existing biosafety framework of India caters to consumer needs while carrying out the handling and labelling mechanism of GM crops.

Research Design & Methods: The present study discusses handling and labelling of GM crops as both play a fundamental role in order to ensure food safety for consumers. In doing so the study adopts a doctrinal research method bringing in India's biosafety framework alongside international instruments adopted. To extend support to the deliberations made, a comparative study has been done as well by reflecting on the approaches of the US and EU in the present context.

Findings: The study does not deny the competency that the current biosafety framework and statutory authorities in place have to regulate GM crops. But, absence of authoritative liability catalyzed with unbridled power eclipses consumer rights thereby hindering public confidence. Such hindrances become subject to judicial review as has been with GM Mustard by the Apex Court. Hence arises the need for indispensable reform.

Contributions: India, being an executive committee member of the Codex Alimentarius Commission (CAC) and 'supposedly' adhering to it must be having in place an effective biosafety framework to take care of handling and labelling of GM crops. Interestingly enough, in all the three transgenic crop matters that India has been home to, fingers have been pointed towards authoritative decision-making. The underlying problem therefore gets addressed in this research thereby adding to the series of literatures that is numerically less in the present time.

Novelty: This study uniquely centers consumer rights within GM crop regulation by highlighting overlooked regulatory loopholes and issues of authoritative decision-making in India's biosafety framework.

Keywords: GM Crops, Consumer, Labelling, Handling, Biosafety

JEL codes: Q1, K1, K3
Article type: research paper

INTRODUCTION

The association of GM crops with food security, as argued by biotechnologists continues to be a potential yet debatable topic (Balashanmugam, et.al, 2016). The opponents raise varied challenges that are inter-linked with the said association, one of them being handling and labeling of GM crops. Considering the vast differences that exist between organic crops with that of GM crops alongside the uncertainty that gene technology (Bhardwaj, et.al, 2024) is friends with, the raised concerns that this research delves into, remains significant. While there lies no alternative to regulation of GM crops, one of the fundamental reasons behind such regulation remains public interest. It is the consumers who remain the representative of public interest (Biaswas, et.al, 2014). As the

consumers are on the receiving end when it comes to GM crops, any existing or forthcoming regulation must take consumers into account as the primary stakeholder.

Until now, India has not witnessed approval of GM crops that are made available in the market for consumers. But, the same does not remain a ground to claim the relevance of the present research. This is because the right to access the benefits of technology alongside the right to food cannot be denied by any State to its people. Furthermore, the mother legislation regulating gene technology in India dates back to 1989 which makes one reason whether India remains open to biotechnological application in agriculture. The literature which supports the role of GM crops in ensuring food security thereby revitalizing agriculture, does consider food safety as one of the indispensable facets of food security (Biszko and K.M, 2012). It is in this context that the present study highlights handling and labelling of GM crops in light of the regulatory landscape in India.

Crops which are genetically modified involve gene insertion of different crops in order to produce crops having specialized traits. Such traits along with offering multiple purposes, are primarily used to enhance crop yield and reduce pesticides usage in crops. Two of the common types of GM crops that are generally used are Herbicide tolerance (Ht) crops and Bt (Bacillus thuringiensis) crops. While the former makes crops herbicide-resistance, the latter being a bacteria equipped with insecticide-resistance, prevents harm in crops through targeted control. Put simply, GM crops are products of transformation that although created for a definite purpose may not end up serving the purpose in the same manner as imagined (Balashanmugam, et.al, 2016). Additionally, the consequences of the technology remain undefined and unidentified to a greater extent.

Inferring from the above, application of GM crops that are consumable for the purpose of addressing the social concern of food insecurity fundamentally calls for food safety that requires risk assessment, risk handling and risk management. The present research therefore addresses the question as to whether the present biosafety framework of India is effective to handle GM crops while complying with international and domestic requirements of labelling and production mechanism.

LITERATURE REVIEW

Handling of GM crops in India: a myth or a reality?

Handling of GM crops rests on the shoulder of the biosafety framework in India. Pioneered by the Environment Protection Act, 1986, the GM Rules, 1989 was introduced to serve the backbone of India's biosafety infrastructure. The Rules have been designed following the disaggregated approach thereby imposing statutory powers in a top-down fashion. The Preamble of the Rules, reflecting its scope, mentions its application to be fundamental in matters concerning manufacture, usage, import, export and storage of genetically engineered products. While each term has a direct nexus with 'handling' of GM crops, it remains significant to understand as to what involves 'handling' as far as transgenic crops are concerned. 'Handling', it signifies dealing with or treating a situation. A cautious approach towards handling of 'hazardous substance' has been taken by Sections 6, 8 and 25 of the EPA, 1986, summarily dealing with rule-making authority of the Central Government towards procedural compliant handling of 'hazardous substances'. As the GM Rules, 1989 was introduced by the 1986 legislation, it would be ideal to state that handling of GM crops is equivalent to handling of hazardous substances.

Article 1 of the Cartagena Protocol on Biosafety mentions the objective of the Protocol which involves application of the precautionary principle as a means to provide adequate level of protection in all matters of transfer, handling and use of modern biotechnology's products. Being an avid member of the Protocol, India's biosafety framework is supposed to be reflective of the same. Categorically speaking therefore, handling of GM crops will not only involve regulatory authorities' supervision but also a thorough safety assessment of the same from the time of production till the time it gets consumed. By virtue of the 1989 Rules, the Institutional Biosafety Committee (IBSC) has been crafted with the responsibility to assist any person, institution or occupier involved in handling GMOs and its products. Such assistance involves making of an emergency plan, applying the precautionary principle, according to the guidelines provided by the Review Committee on Genetic Manipulation (RCGM). At the state-level, a similar kind of authority has been placed, namely, the State Biotechnology Co-Ordination Committee (SBCC), that is vested with the power to review safety measures adopted by entities, handing GMO-based products, periodically.

Drawing from the above, it is ideal to mention that the Codex Alimentarius, the Food Code functioning under the Food and Agriculture Organization (FAO), idealizes handling of GM crops to involve premarket assessments and post-market monitoring. India being an executive committee member of the said Code is expected to adopt the guidelines laid down by the CAC promoting quality food for all. The term 'quality' is beautifully included in the name of the ultimate decision-maker of any GM product's fate, as established in the GM Rules, 1989 by the name of Genetic Engineering Appraisal Committee (GEAC). 'Quality' stands synonymous with 'appraisal' indicating the legislative intention behind changing the name of the authority from what it was previously. Although the handling responsibility vests on three authorities primarily, namely, IBSC, RCGM and SBCC, as indicated by the GM Rules, 1989, the GEAC also remains ipso facto tasked with handling of GM crops (Black and Julia, 1998).

Both SBCC and GEAC, being involved significantly in handling of GM crops, have been vested with power to take punitive actions drawing from the EPA, 1986. Such actions are consequences of violating statutory provisions by industries, individuals, handling units dealing with manufacture and production of transgenic crops. As liabilities of the established authorities remains absent in the 1989 Rules, any power vested on them is prone to frequent misuse. The actions of the established authorities often supersede their statutory boundaries resulting in consequences that exceed the potential of such authority. It is this juxtaposition that often fails to distinguish whether handling of GM crops has remained an illusion that gets perceived as reality.

The many faces of GEAC: A look into transgenic crops of India

GEAC remains in the headlines of every piece of information that gets circulated with respect to transgenic crops. This is because GEAC is the supreme authority to decide on the whereabouts of GM crops in India. The burden of proof to justify and refute every claim that are raised against and for the GM crops vests on GEAC therefore. In addition to this, the statutory powers that GEAC is empowered with must come with liabilities and limitations. Such not being the case as far as GM Rules, 1989 are concerned, makes it difficult to recognize whether the authority is a toothless tiger or a required judge to regulate GM crops in India. Rule 9(2) of the GM Rules, 1989 deserves special mention as it vests unregulated power on GEAC for 'deliberate release' of GMO in the environment, whenever the authority deems fit (Black and Julia, 1998). With this unbridled power, and functioning under the Ministry of Environment, GEAC has repeatedly proved to be negligent in differentiating between the inherent and the consequential risks that GM crops possess.

When Bt Brinjal was introduced to follow the same lines of success as Bt Cotton had witnessed, GEAC failed to realize that there is a vast difference between a cash crop and a consumable food crop. The latter welcomes food safety, consumer rights, surrounding consumption of such food and the possible results of such consumption, unlike the former. For Bt Brinjal, the way was given by RCGM, certifying it to be environmentally prosperous additionally declaring it to be in compliance with the 'Guidelines for the safety assessment of foods derived from GE plant, 2008', only to await the devastating consequences. The GEAC, jumping on the wagon of RCGM, did not hesitate the glory fate awarded to the first GM food crop. Mayco being the company in responsibility to conduct the trials of Bt Brinjal, upon receiving the consent from the GEAC, led the way, keeping the public in abeyance. It is therefore worth mentioning Supreme Court's interference in the Bt Brinjal fiasco, as the Court not only upheld the right to be informed for the public in general who remain in the receiving end of any food crop produced and distributed, but also judicially reviewed the functioning of the statutory authority, established under the GM Rules, 1989. The MoEF as a response to the Apex Court's intervention, imposed an indefinite moratorium, dated 9th February, 2010. With a span of three years from the issuance of the moratorium, the Biotechnology Regulatory Authority of India Bill, 2013 (BRAI Bill, 2013) witnessed the daylight. By virtue of the proposed Bill, an apparent weak authority was introduced that was to adjudicate on 'substantial questions relating to modern biotechnology' without knowing what the phrase meant (BRAI Bill, 2013). Absence of a definition welcomed ambiguity. Such ambiguity extended to reflect the loophole in the very design of the proposed Bill as there was no specification on the liability that arises from the damage caused by the application of modern biotechnology. BRAI chose to exclude GM crops and food from being subject of the FSSAI, 2006 thereby failing to achieve the purpose for its initial existence. The end consumers, comprising the primary stakeholders of GM crops, therefore, remained hindsight under the proposed Bill (Singh, et.al, 2018).

While the biosafety framework in India continued to gather its falling pieces, the environment release of DMH-11 Mustard was recommended by the GEAC in its 147th Meeting. The failure of the BRAI Bill (2013) restored FSSAI to its initial position of being one of the regulators whose recommendations were to be counted whenever GEAC proceeded with approving GM food crops. Unfortunately, FSSAI's absence in the approval of the GM Mustard, powered with lack of adequate risk assessment, confirmed the fact that GEAC did not really learn from its previous mistakes. It appeared convenient for GEAC to take the guidance of the Indian Council for Agricultural Research (ICAR) and Indian Council for Medical Research (ICMR) when evaluating and assessing the environmental and health associated risks surrounding GM Mustard. GEAC's flag bearing nature turned blind eye when it came to handling of GM crops repeatedly, questioning the very framework it is part of (Bratspies and Rebecca, 2002).

The inter-departmental conflicts on GM crops handling: An underrated challenge in India

GMOs and associated products do not come under singular governance of one particular Ministry but involve overlapping and supervisory functions of multiple departments working under different ministries. While the GM Rules, 1989 comes under direct supervision of the MoEFCC, authorities like RCGM, RDAC, IBSC come under the supervision of the Department of Biotechnology under the Ministry of Science and Technology. Although the journey of a GM crop from development to production involves collective but individual responsibility, interestingly enough, GEAC remains the final decision-maker as far as environmental release of GM crops are concerned (Dutta and S.S., 2023).

Justice BV Nagarathna while delivering her observations in the case of Gene Campaign & Anr vs. Union of India, expressly noted that any statutory body that is designed with required powers and functions, cannot proceed unconsciously or under the influence of impulse. Whenever making decisions, application of mind should not be discounted. Additionally, such authority remains bound by its own action. Application of mind is best understood

by disclosure of such mind whenever circumstances call for. Whichever authority is being vested with a specific activity under the 1989 Rules, needs to follow the provision that is governing it. Any change in the decision-making will be expected to be reason supported and made for the greater good of greater numbers. Repeated absence of FSSAI in the decision-making process not only made the top court question the integrity of GEAC as an established authority but also made the Court judicially review the authority's approval of first consumable GM crop, GM Mustard (Kaur, et.al, 2013).

Interestingly enough, in its 146th meeting, GEAC revisited its decision of deferring field demonstrations of GM mustard considering its adverse consequences on honeybees and other pollinators. The revisit was a prompt attempt following the communication received from the applicant of GM Mustard recommending environmental release. It is this communication that sought immediate comments from the Department of Biotechnology (DBT), Department of Agricultural Research and Education (DARE) and ICAR. Additionally, GEAC constituted another Expert Committee without any justification for such action, headed by a member of DBT thereby outrightly accepting the environmental release of DMH-11 Mustard. It was therefore in its subsequent meeting that the GEAC contradicted itself thereby green signaling transgenic mustard. The submissions made by the petitioners revealed that GM Mustard was given approval for commercial cultivation while the Union Government continued deliberation on the same. The approval of GM Mustard was devoid of field trials as well, which remained the only way of identifying the consequences it carried on pollinators (Mandel and G.N, 2004).

Following the judgment that remains under consideration by the higher bench of the Apex Court, MoEF&CC proposed amendment to the GM Rules, 1989 in order to ensure transparency in the decision-making process of the statutory authorities. By virtue of the draft Amendment Rules dated 2024, there has been addition of a new definition, named, 'conflict of interest'. With an idea to avoid influential decision-making by the authorities in place, the purpose behind the definition has been to enforce rule against bias. The need for such a definition to be included in the Rules, as proposed, is because, majority of the meetings of the authorities in place, to approve, discuss, debate or deliberate on approval of a GM crop, is rendered ineffective. In order to implement the definition, the proposed amendment incorporates Rule 4(A) read with Schedule II that lays down the procedure of declaring conflict of interest in accordance with the code of conflict.

Labelling of consumable GM crops in India: An attempt to 'inform' the 'misinformed' consumers

The confusions created and the prevalent ambiguities highlighted in the previous paras has a possibility of finding light at the end of the tunnel under labelling of GM crops. While labelling of consumable GM crops and incidental products appear to be an unrequired compliance for some, information concerning genetic modification remains significant precisely because the production process of GM crops is strikingly different than organic crops (Carter, et.al, 2012). Statutorily defined as any written, printed or graphic matter, accompanying food or consumable product, labelling, may also be displayed near the food. Labelling acts as a bridge between the information known by the seller with that of the information that the buyer must be acknowledged with. The avoidance of asymmetric information remains one of the fundamental grounds for labelling to gain significance (Cheyne and Ilona, 2009).

Any public information that is initially kept undisclosed, directly raises suspicion on the producer's actions thereby invoking their liability in such context. It is labelling that make consumable GM crops a quality food to consume as it is inclusive of product detailing, name-origin and place of the product, the nutritional information that is associated with it, the content of allergen in it, the expiry date attributed to it and also the way in which the same should be consumed. A sense of trust and confidence on the part of the consumers alongside surety and express attributes of the product, is what labelling has to offer.

The FSSAI by virtue of Section 22 of the Act of 2006 gains the required power to be the deciding authority on producing, manufacturing and selling of GM crops and food unless otherwise expressly provided. The said provision appears to be a saving clause, beginning with the phrase, 'save as otherwise provided', indicating the reason for its standing. Furthermore, mandatory packaging and labelling of GM foods as guaranteed by Section 23 comes as a safety jacket for the consumers to battle deception. The Act read with the FSSAI Regulations, 2020 lays down the components of labelling which includes, the ingredients used in the product, the nutritional weightage the product holds, details of the manufacturer, the nature of the product, country of origin and the instructions guiding its use. This information is not specific to transgenic crops but is applicable to them. When specifically talking about GM crops, FSSAI mandates labeling for packaged food products which have more than one percent of GM ingredients in it. The threshold has been reduced from the previous five percent. FSSAI declares that such reduction was carried out following consultation with all stakeholders. While anything mandated indicates that failure to such compliance awaits legal consequences, whether the consultation with 'stakeholders' by FSSAI included consumers representing public interest remains unanswered.

Substantial equivalence vis a vis co-existence: Where does India stand?

Reviewing India's biosafety framework with substantial focus on handling and labelling does not stand complete without a comparative analysis with the US and EU. The fundamental reason behind choosing such comparison is because of the working model each adopts to govern GM crops. Giving significance to consumer

rights, both US and EU approaches GM crops with India ideally coming out as a mixture of both. The approach of regulating GM crops is seen to be strikingly different in the US and the EU (Rivera-Torres and Olivette, 2003). The possible reason behind the same can be the perception that regulators have developed in these regions with respect to transgenic crop production and consumption. While the US remains a visibly pro-market nation voicing for equivalent treatment of GM crops and organic crops, the EU has remained increasingly cautious in order to make a deliberate attempt to improve the relationship between the two different categories of crop (Carter, et.al, 2012). Suspecting GM-derived food to be carcinogenic and allergic by nature, gravely affecting animals and human health, EU regulatory agencies could not welcome the principle of substantial equivalence unlike the US.

It goes without saying that the food regulations in the US developed to keep trade relationships with other nations alive. The US Food and Drug Administration, having the authority to remove any product from the market that appears to be anti-public health safety, vests the burden of maintaining quality and safe food to the manufacturers of such food. This approach while on one hand embraces technological development promoting agricultural revitalization, on the other requires effective regulatory framework in place. The US felt the need of authority to regulate GM crops particularly as they are products of science. Conventional farming producing organic crops never required safety assessment as they qualified it with the presumption of being safe owing to its nature. Therefore, anything new has been perceived to be approached with precaution among consumers in general. The food authorities in place today in the US, owes its introduction to genetic engineering technology and its uses (Grossman and Margaret Rosso, 2003).

While in the US, public attention surrounding GM crops has been relatively low, contrarily, in the EU, GM crops have attracted mass debate and attention. The EU appears to be well-informed about the inevitable and unavoidable contamination of organic crops, when GM crops are to be commercially cultivated. It is this awareness that happened to make the EU think about the principle of co-existence in the context of GM crops, standing distinctively from the US's adoption of substantial equivalence. Irrespective of whatever principle in the context of GM crops gets discussed, each comes with its distinctive need of regulation to align with the potential threats that such principles bring in. It is in this context that the US's tort liability enforcement for determining liability in cases of environment damages alongside damage to individuals, may be discussed. Unlike the EU, the US does not follow specific legislation or have designated rules in place to determine liability arising in disputes associated with GM crops which appears to be in relation with human health and environment. When it comes to consumable crops, the US relies entirely on the intellect of the Food and Drug Administration (FDA) that carries the weight of regulating products of biotechnology that are 'safe' to be consumed (Rehbinder, et.al, 2006).

The FDA shares a coordinated relationship with the US Department of Agriculture (USDA) who implements the substantial equivalence principle thereby determining what is 'safe' to grow. Not that there aren't other authorities at play in assisting those named but each works in consonance with the other thereby ensuring pre-market safety assessment of the product made available for consumption. When talking about the EU, the risk assessment process being centralized did keep its doors closed for GM crops for the longest time. The reopening is therefore invariably subjected to multiple layers of protection coming from Directive 2001/18/EC, Regulations 1829/2003 and 1830/2003. With mandatory labelling for GMO products at a relatively low level of 0.9%, European Court of Justice have ruled to include new genomic techniques as subjects of similar regulation like that of other products of gene technology. Such decisions do give consumers the assurance of security as far as their 'right to know' and 'right to consume safe foods' are concerned thereby making authorities liable for every action. Something for India to adopt and learn according to their domestic necessity, the previous paragraph provides an insight on the possibilities that the nation can turn to in order to prepare itself for tomorrow. Such would bring in the much needed clarity in authoritative actions thereby satisfying the purpose for enjoying the fruits of modern biotechnology.

METHODS

While a relative part of the proposed research question has been highlighted above and the remaining awaiting below, it is appropriate to delve into the research methodology adopted for this paper. The present research is a reflection of doctrinal legal research methodology considering the legislative texts interpreted alongside existing literatures in the given context to address the proposed research question. In order to uplift the present, the study takes the help of analytical research methodology as well.

Analytical research methodology further assists in drawing a critical analysis of the existing biosafety framework in India. It is this critic that decides whether consumer interest and rights have a prima facie significance or not. It helps in carrying out an institutional analysis as well where the GEAC has remained the face and its decisions the subject of analysis.

The study remains incomplete if comparative research methodology is not resorted to. It is this comparison that highlights the loopholes that India's biosafety framework has been home to. The choice of such comparison with the USA and EU has been solely because of their distinctive approach towards accepting GM crops as a possible way to address food security. USA's openness and EU's cautious approach makes India question its position thereby asking for ambiguity removal and transparency enforcement for upholding consumer's rights.

RESULT AND DISCUSSION

Following the footsteps of Codex Alimentarius Commission: How much distance remains to cover for India?

Understanding Codex involves knowing the difference between Codex Alimentarius and CAC. While the former is a collection of food standards that are internationally adopted with the larger purpose of safeguarding consumer's health, the latter is the body that works towards developing these standards thereby enforcing fair practices in food trade. As Codex Alimentarius covers all varieties of foods, its involvement in the governance of GM crops remains indispensable. The role of Codex along with maintaining food safety, extends towards erasing trade barriers among nations, specifically food traders. In order to do so there needs to be a set of uniform rules that will help in governance of nations that remain home to varied food laws. It is with this intention that Codex came into existence (CAC, 2003). Established by FAO and World Health Organization (WHO), Codex's standards are not a substitute of national legislation but rather complement to it. Considering the same, in order to reflect on India's road travelled in Codex's journey, one needs to look at the harmony Indian legislations share with that of Codex's standards (FAO and WHO, 2003).

Codex's Guideline for The Conduct of Food Safety Assessment of Foods Derived from Recombinant DNA-Plants extends support to the principles of Risk Analysis of Foods Derived from Modern Biotechnology, which particularly focuses on risk assessment of foods that are derived from new plant varieties. It is notable to mention that the definitional clause of the 2006 Act defines 'risk analysis' as a term comprising risk assessment, risk management and risk communication. While the first of the three comprising words is a scientific process involving a series of steps, risk management signifies evaluation of existing policies and regulations in place, after taking into consideration concerns of interested parties (Engel, et.al, 2018). Risk analysis can only take off the runway if the third term, 'risk communication', is executed successfully. Defined as a dialogue between decision-makers and stakeholders, risk communication does not have a definite time of adoption in the risk analysis process. Rather, the same has the maximum presence in the entire process considering the optimum need for information exchange with the stakeholders, primarily the consumer, in regards to transgenic crops and their intended and unintended consequences. The degree of risk measurement is determined by its effect on human health under Codex. Resonating the same, India's food safety legislation defines 'unsafe food' as the food that is injurious to human health (Heslop and L. A., 2006).

Furthermore, India's domestic legislation on food safety incorporates a saving clause with the help of which every individual is restrained from carrying any activity in association with GM foods or incidental products other than what is provided in the Act or any law in force. The said provision provides a legal mandate as far as decision-making with respect to modern biotechnology's use in social security is concerned. But the said legal mandate has been in eclipse each time the GEAC has approved a GM crop for environment release and subsequent commercial cultivation. The role of FSSAI as the authorized body alongside the statutory bodies established under the GM Rules, 1989 has appeared to remain in oblivion with the former's presence remaining negligible (FAO and WHO, 2003). Although the Act of 2006 has prima facie remained in good terms with Codex's standards in terms of risk analysis, lack of transparency on the part of GEAC continues to be counted by the critics of GM crops.

In addition to the 2006 Act walks the Risk Analysis Framework, 2016 that largely intends to ensure transparency in decisions reflecting usage of risk analysis. Considering the varied perception that stakeholders of GM crops have in them alongside the government's recognition of modern biotechnology's potential, the framework remains the backbone of every decision made in this respect. Introducing itself exactly a decade after the Food Safety Act has been in place and more than a decade after the GM Rules came, the framework defines 'risk' as an amalgamation of 'hazard' and 'exposure' (Bratspies and Rebecca, 2002). Both these concepts have a direct association with consumers as a stakeholder to GM crops as they remain exposed to the hazards offered by such crops if the same is not being delivered in the market according to set standards. The framework attempts for a divergent approach for food safety as it intends to protect both human health and the environment. The framework visualizes 'risk communication' as the speed-breaker for every decision made in the context of GM crops. This is because, according to the framework, such communications filter the authoritative decisions after receiving suggestions from the stakeholders inclusive of consumers. As communicated previously, India's re-election as an executive committee member of Codex gives a ray of hope for the consumers who generally being ill-informed have a scope to know their consumption better. Nevertheless, answering the proposed question in the present heading although will not have a consistent answer, buckling up application of the existing provisions and identifying the 'do's' and 'don'ts' contributes significantly.

CONCLUSION

The concluding remarks to the present paper along with answering the proposed research question also welcomes similar literature to develop taking into account the significant absence of the same in the demanding times. The present work comes out as a reflection of the split verdict of the Apex Court where policy formulation in consultation with both central and state government alongside stakeholders has been asked for. The

responsibility, while being vested on the MoEF&CC, does not exclude any authority or involved ministry per se. Instead, a collective effort has been requested to be executed within a reasonable period of time. The process intends to safeguard the consumers preferably because they represent public confidence and interest. Without both these elements, no law plays out well enough to achieve its decorated purpose.

A missing link that continues to exist in India's biosafety framework is the liability of the placed authorities. No provision in the GM Rules, 1989 exists with respect to liability thereby welcoming discretion, arbitrariness and lack of legal spirit predominance on the part of statutory authorities. Both the US and EU models, although distinct from one another, do incorporate liability of authorities in order to restrict vested power to become uncontrolled. Nothing but tyranny is the product of uncontrolled power leading the matters to the judiciary with the ultimate resort being judicial review.

It is by virtue of the principles of natural justice that every decision given by authority of any nature must be backed by reason. Both cases of consumable GM crops that GEAC had approved in haste, although previously having the opposite mind, do not appear to be justified at any forum. Every expert committee formed by the GEAC does not have a justification which originally the authority is bound to provide considering the principles of administrative law. Such absence of accountability, violation of ratified conventions and domestic adoptions on the part of the ministry and authorities established, minimizes public confidence and trust represented by the consumers at large.

The existing biosafety framework of India does have scope for effective capacity building to construct a dynamic governance system for regulating biotechnology and its products. But, for making such a framework cater to the objective for its inception, the scope for using such technology has to be identified. If such identification is to address food security, food safety cannot be ignored and misplaced as the consequence remains unprecedented. GEAC therefore cannot work singularly instead have to harmoniously work with FSSAI to ensure food safety.

Handling and labelling, playing the anchor of the process, need to come with definite check and balance with periodical reports addressing the way they are undertaken in each case of GM crops. In this context, in order to uphold consumer rights, the existing biosafety framework with the statutory authorities, have to work within their defined powers and be liable for their actions even after incorporating principles safeguarding public interest, environmental welfare and human health. It is this that makes the framework competent for catering consumer needs.

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